



**Billing Code: 4520-43-P**

**DEPARTMENT OF LABOR**

**Mine Safety and Health Administration**

**Petitions for Modification of Application of Existing Mandatory Safety Standards**

**AGENCY:** Mine Safety and Health Administration, Labor.

**ACTION:** Notice.

**SUMMARY:** This notice is a summary of petitions for modification submitted to the Mine Safety and Health Administration (MSHA) by the parties listed below.

**DATES:** All comments on the petitions must be received by MSHA's Office of Standards, Regulations, and Variances on or before [INSERT DATE 30 DAYS FROM THE DATE OF PUBLICATION IN THE FEDERAL REGISTER].

**ADDRESSES:** You may submit your comments, identified by "docket number" on the subject line, by any of the following methods:

1. Electronic Mail: [zzMSHA-comments@dol.gov](mailto:zzMSHA-comments@dol.gov). Include the docket number of the petition in the subject line of the message.

2. Facsimile: 202-693-9441.

3. Regular Mail or Hand Delivery: MSHA, Office of Standards, Regulations, and Variances, 201 12<sup>th</sup> Street South, Suite 4E401, Arlington, Virginia 22202-5452, Attention: Sheila McConnell, Director, Office of Standards, Regulations, and Variances.

Persons delivering documents are required to check in at the receptionist's desk in Suite

4E401. Individuals may inspect copies of the petition and comments during normal business hours at the address listed above.

MSHA will consider only comments postmarked by the U.S. Postal Service or proof of delivery from another delivery service such as UPS or Federal Express on or before the deadline for comments.

**FOR FURTHER INFORMATION CONTACT:** Barbara Barron, Office of Standards, Regulations, and Variances at 202-693-9447 (Voice), barron.barbara@dol.gov (E-mail), or 202-693-9441 (Facsimile). [These are not toll-free numbers.]

**SUPPLEMENTARY INFORMATION:** Section 101(c) of the Federal Mine Safety and Health Act of 1977 and Title 30 of the Code of Federal Regulations Part 44 govern the application, processing, and disposition of petitions for modification.

#### I. Background

Section 101(c) of the Federal Mine Safety and Health Act of 1977 (Mine Act) allows the mine operator or representative of miners to file a petition to modify the application of any mandatory safety standard to a coal or other mine if the Secretary of Labor (Secretary) determines that:

1. An alternative method of achieving the result of such standard exists which will at all times guarantee no less than the same measure of protection afforded the miners of such mine by such standard; or

2. That the application of such standard to such mine will result in a diminution of safety to the miners in such mine.

In addition, the regulations at 30 CFR 44.10 and 44.11 establish the requirements and procedures for filing petitions for modification.

## **II. Petitions for Modification**

Docket Number: M-2017-017-C.

Petitioner: Paramount Contura, LLC, Three Gateway Center, 401 Liberty Avenue,  
Pittsburgh, Pennsylvania 15222-1000.

Mine: Deep Mine 44, MSHA I.D. No. 44-07308, located in Dickenson County, Virginia.

Regulation Affected: 30 CFR 75.1700 (Oil and gas wells).

Modification Request: The petitioner requests a modification of the existing standard to permit an alternative method of compliance with respect to gas wells. The petitioner proposes to plug and mine through vertically drilled gas wells. The petitioner states that:

The following alternative methods will be used when mining through vertically drilled degasification boreholes with horizontal laterals to permit mining through the boreholes.

a. The petition will apply to all wells being mined through located within the mineable reserve at Paramount Coal Company's Deep Mine 44.

b. District Manager approval is required for the following proposed alternative methods:.

(1) A safety barrier of 300 feet in diameter (150 between any mined area and a well) will be maintained around all wells (defined herein to include all active, inactive, abandoned, shut-in, and previously plugged oil and gas wells, and including water injection wells) until approval to proceed with mining has been obtained from the District Manager (DM). Wells that were drilled into potential oil or gas producing formations that did not produce commercial quantities of either gas or oil (wildcat wells or dry holes) are also defined as oil or gas wells.

(2) Prior to mining within the safety barrier around any well that is intended to be mined through, the mine operator will provide the DM a sworn affidavit or declaration executed by a company official stating that all mandatory procedures for cleaning out, preparing, and plugging each gas or oil well have been completed as described by the terms and conditions of this petition. The affidavit or declaration must be accompanied by all logs described below and any other records described in those subparagraphs which the DM may request. The DM will review the affidavit or declaration, the logs, and other records that have been requested, and may inspect the well. The DM will determine if the operator has complied with the procedures for cleaning, preparing, and plugging each well as described by the terms and conditions of this petition. If the DM determines that the procedures have been complied with, the DM will provide approval and the mine operator may mine within the safety barrier of the well, subject to the terms of this petition. The petitioner states that the terms and conditions of this petition apply to all types of coal mining.

c. The petitioner proposes to use the following procedures when cleaning out and preparing vertical oil and gas wells prior to plugging or replugging:

(1) If the total depth of the well is less than 4,000 feet, the operator will completely clean out the well from the surface to at least 200 feet below the base of the lowest mineable coal seam, unless the DM requires cleaning to a greater depth based on the DM's judgment as to what is required due to the geological strata, or due to the pressure of the well (the operator will provide the DM with all information it possesses concerning the geological nature of the strata and the pressure of the well). If the total depth of the well is 4,000 feet, or greater, the operator will completely clean out the well

from the surface to at least 400 feet below the base of the lowest mineable coal seam.

The operator will remove all material from the entire diameter of the well, wall to wall.

(2) The operator will prepare down-hole logs for each well that will consist of a caliper survey and log(s) suitable for determining the top, bottom, and thickness of all coal seams and potential hydrocarbon producing strata and the location for a bridge plug.

The DM may approve the use of a down-hole camera survey in lieu of down-hole logs.

In addition, a journal will be maintained describing the depth and nature of each material encountered; bit size and type used to drill each portion of the hole; length and type of each material used to plug the well; length of casings(s) removed, perforated or ripped or left in place, any sections where casing was cut or milled; and other pertinent information concerning cleaning and sealing the well. Invoices, work-orders, and other records relating to all work on the well will be maintained as part of this journal and provided to MSHA on request.

(3) When cleaning out the well, the operator will make a diligent effort to remove all of the casing in the well. If it is not possible to remove all of the casing, then the operator must take appropriate steps to ensure that the annulus between the casing and between the casings and the well walls are filled with expanding cement (minimum 0.5 percent expansion upon setting) and contain no voids. If the casing cannot be removed, it must be cut or milled at all mineable coal seam levels. Any casing which remains will be perforated or ripped. Perforations or rips are required at least every 50 feet from 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam up to 100 feet above the uppermost mineable coal seam. If the operator, using a casing bond log, can demonstrate to the satisfaction of the DM that all

annuli in the well are adequately sealed with cement, then the operator will not be required to perforate or tip the casing for that particular well. When multiple casing and tubing strings are present in the coal horizon(s), any casing which remains will be ripped or perforated and filled with expanding cement as indicated above. An acceptable casing bond log for each casing and tubing string is needed if used in lieu of ripping or perforating multiple strings.

(4) If the DM concludes that the cleaned-out well is emitting excessive amounts of gas, a mechanical bridge plug will be placed in the borehole in a competent stratum at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the lowest mineable coal seam but above the top of the uppermost hydrocarbon-producing stratum. The DM may require a greater distance for the mechanical bridge plug to be placed below the lowest mineable coal seam based on the geological strata, or due to the pressure within the well (the operator will provide the DM with all information it possesses concerning the geological nature of the strata and the pressure of the well). If it is not possible to set a mechanical bridge plug, an appropriately sized packer may be used.

(5) If the uppermost gas-producing stratum is within 300 feet of the base of the lowest mineable coal seam, the operator will properly put in place mechanical bridge plugs or cap seal plugs or a suitable brush plug to isolate the hydrocarbon-producing stratum from the expanding cement plug. Nevertheless, the operator will place a minimum of 200 feet (400 feet if the total well depth is 4,000 feet or greater) of expanding cement below the lowest mineable coal seam, unless the DM requires a greater distance based on the geological strata, or due to the pressure within the well.

d. The petitioner proposes to use the following procedures for plugging or replugging oil or gas wells to the surface after completely cleaning out the well:

(1) The operator will pump expanding cement slurry down the well to form a plug that runs from at least 200 feet (400 feet if the total well depth is 4,000 feet or greater) below the base of the lowest mineable coal seam (or lower if required by the DM based on the geological strata, or due to pressure within the well) to the surface. The operator will place the expanding cement in the well under a pressure of at least 200 pounds per square inch. Portland cement or a lightweight cement mixture may be used to fill the area from 100 feet above the top of the uppermost mineable coal seam (or higher if required by the DM due to the geological strata, or due to the pressure within the well) to the surface.

(2) The operator will embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, the operator will extend a 4½-inch or larger casing, set in cement, at least 36 inches above the ground level with the American Petroleum Institute (API) well number either engraved or welded on the casing. When the hole cannot be marked with a physical monument (e.g., prime farmland), high-resolution GPS coordinates (one-half meter resolution) are required.

e. The petitioner proposes to use the following procedures for plugging or replugging oil and gas wells for subsequent use as degasification boreholes after completely cleaning out the well:

(1) The operator will set a cement plug in the well by pumping expanding cement slurry down the tubing to provide at least 200 feet (400 feet if the total well depth

is 4,000 feet or greater) of expanding cement below the lowest mineable coal seam, unless the DM requires a greater depth based on the geological strata, or due to the pressure within the well. The expanding cement will be placed in the well under a pressure of at least 200 pounds per square inch. The top of the expanding cement will extend at least 100 feet above the top of the coal seam being mined, unless the DM requires a greater distance based on the geological strata, or due to the pressure within the well.

(2) The operator will securely grout into the bedrock of the upper portion of the degasification well a suitable casing in order to protect it. The remainder of the well may be cased or uncased.

(3) The operator will fit the top of the degasification casing with a wellhead, equipped as required by the DM in the approved ventilation plan. Such equipment may include check valves, shut-in valves, sampling ports, flame arrestor equipment, and security fencing.

(4) Operation of the degasification well will be addressed in the approved ventilation plan. This may include periodic tests of methane levels and limits on the minimum methane concentrations that may be extracted.

(5) After the area of the coal mine that is degassed by a well is sealed or the coal mine is abandoned, the operator must seal the degas holes using the following procedures:

(i) Insert a tube to the bottom of the drill hole or, if not possible, to at least 100 feet above the coal seam being mined.



(ii) Set a cement plug in the well by pumping Portland cement or a lightweight cement mixture down the tubing until the well is filled to the surface.

(iii) Embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, the operator will extend a 4½-inch or larger casing, set in cement, at least 36 inches above the ground level with the API well number engraved or welded on the casing.

f. The petitioner proposes to use the following procedures for preparing and plugging or replugging oil or gas wells that cannot be completely cleaned out due to damage to the well caused by subsidence, caving or other factors:

(1) The operator will drill a hole adjacent and parallel to the well to a depth of at least 200 feet below the lowest mineable coal seam, unless the DM requires a greater depth based on the geological strata, or due to pressures within the well.

(2) The operator will use a geophysical sensing device to locate any casing that may remain in the well.

(3) When the operator determines, and the DM agrees that there is insufficient casing in the well to allow the method outlined in subparagraph (g)(3) to be used, then the operator will use a horizontal hydraulic fracturing technique to intercept the original well. From at least 200 feet below the base of the lowest mineable coal seam to a point at least 50 feet above the seam being mined, the operator will fracture in at least six places, at intervals to be agreed upon by the operator and the DM after considering the geological strata and the pressure within the well. The operator will then pump

expanding cement into the fractured well in sufficient quantities and in a manner that fills all intercepted voids.

(4) The operator will prepare down-hole logs for each well. The logs will consist of a caliper survey and log(s) suitable for determining the top, bottom, and thickness of all coal seams and potential hydrocarbon-producing strata, and the location for the bridge plug. The operator may obtain the logs from the adjacent hole rather than the well if the condition of the well makes it impractical to insert the equipment necessary to obtain the log. The DM may approve the use of a down-hole camera survey in lieu of down-hole logs if the DM determines that such logs would not be suitable for obtaining the above-listed data or are impractical to obtain due to the condition of the drill hole. A journal will be maintained, describing the depth and nature of each material encountered; bit size and type used to drill each portion of the hole; the length and type of each material used to plug the well; length of casing(s) removed, perforated, ripped, or left in place; and other pertinent information concerning sealing the well. Invoices, work-orders, and other records relating to all work on the well will be maintained as part of the journal and provided to MSHA on request.

(5) After the operator has plugged the well, the operator will plug the adjacent hole, from the bottom to the surface, with Portland cement or a lightweight cement mixture. The operator will embed steel turnings or other small magnetic particles in the top of the cement near the surface to serve as a permanent magnetic monument of the well. In the alternative, the operator will extend a 4½-inch or larger casing, set in cement, at least 36 inches above the ground level. A combination of the methods outlined in subparagraph (f)(3) and (f)(4) may be used, in a single well, depending upon

the conditions of the hole and the presence of casings. The operator and the DM should discuss the nature of each hole. The DM may require that more than one method be utilized.

g. The petitioner proposes to use the following procedures after approval has been granted by the DM to mine within the safety barrier or to mine through a plugged or replugged well:

(1) A representative of the operator, a representative of the miners, the appropriate State agency, or the MSHA DM may request a conference be conducted prior to mining through any plugged or replugged well. The DM will schedule the conference. The party requesting the conference will notify all other parties within sufficient time for them to have a representative present. The purpose of the conference will be to review evaluate, and accommodate any abnormal or unusual circumstance(s) related to the condition of the well or surrounding strata.

(2) The operator will mine through a well on a shift approved by the DM. The operator will notify the DM and the miner's representative in sufficient time prior to mining-through a well in order to provide an opportunity to have a representative present.

(3) When using continuous mining methods, drilage sights will be installed at the last open crosscut near the place to be mined to ensure intersection of the well. The drilage sights will not be more than 50 feet from the well. When using longwall-mining methods, drilage sights will be installed on 10-foot centers at a distance of 50 feet in advance of the well bore. Drilage sights will be installed in the headgate and tailgate.

(4) The operator will ensure that firefighting equipment, including fire extinguishers, rock dust, and sufficient fire hose to reach the working face of the area of

the well intersection (when either the conventional or continuous mining method is used) is available and operable during all well intersections. The fire hose will be located in the last open crosscut of the entry or room. The operator will maintain the water line to the belt conveyor tailpiece along with a sufficient amount of fire hose to reach the farthest point of penetration on the section. When the longwall mining method is used, a hose to the longwall water supply is sufficient.

(5) The operator will ensure that sufficient supplies of roof support and ventilation materials are available and located at the last open crosscut. In addition, emergency plugs and suitable sealing materials will be available in the immediate area of the well intersection.

(6) On the shift prior to mining through the well, the operator will service all equipment and check it for permissibility. Water sprays, water pressures, and water flow rates used for dust and spark suppression will be examined and any deficiencies will be corrected.

(7) The operator will calibrate the methane monitor(s) on the longwall, continuous mining machine, or cutting machine and loading machine on the shift prior to mining through the well.

(8) When mining is in progress, the operator will perform tests for methane with a hand-held methane detector at least every 10 minutes from the time that mining with the continuous mining machine is within 30 feet of the well until the well is intersected and immediately prior to mining through it. During the cutting process, no individual will be allowed on the return side until the well intersection has been completed and the

area has been examined, and has been declared safe. All workplace examinations will be conducted on the return side of the shearer while the shearer is idle.

(9) When using continuous or conventional mining methods, the working place will be free of accumulations of coal dust and coal spillages, and rock dust will be applied on the roof, rib, and floor to within 20 feet of the face when mining through the well. On longwall sections, rock dusting will be conducted and placed on the roof, rib, and floor up to both the headgate and tailgate gob.

(10) When the well is intersected, the operator will deenergize all equipment and thoroughly examine and determine they are safe before mining is resumed. After a well has been intersected and the working place determined safe, mining will continue in by the well at a distance sufficient to permit adequate ventilation around the area of the well.

(11) If the casing is cut or milled at the coal seam level, the use of torches should not be necessary. However, in rare instances, torches may be used for inadequately or inaccurately cut or milled casings. No open flame is permitted in the area until adequate ventilation has been established around the wellbore and methane levels less than 1.0 percent are present in all areas that will be exposed to flames and sparks from the torch. The operator will apply a thick layer of rock dust to the roof, face, floor, ribs, and any exposed coal within 20 feet of the casing prior to any use of torches.

(12) Non-sparking (brass) tools will be located on the working section and will be used to expose and examine cased wells.

(13) No person will be permitted in the area of the mine-through operation except those actually engaged in the mining operation, including company personnel,

representative of the miners, personnel from MSHA, and personnel from the appropriate State agency.

(14) The operator will alert all personnel in the mine to the planned intersection of the well prior to their going underground if the planned intersection is to occur during their shift. This warning will be repeated for all shifts until the well has been mined through.

(15) A certified official will directly supervise the mine-through operation and only the certified official in charge will issue instructions concerning the mine-through operation.

(16) The responsible person required in 30 CFR 75.1501 will be responsible for well intersection emergencies. The responsible person will review the well intersection procedures prior to any planned intersection.

Within 30 days after this petition becomes final, the petitioner will submit proposed revisions for its approved Part 48 training plan to the DM. The proposed revisions will include initial and refresher training regarding compliance with the terms and conditions of this petition. The operator will provide all miners involved in the well intersection with training regarding the requirements of this petition prior to mining within 150 feet of the next well to be mined through.

Within 30 days after this petition becomes final, the petitioner will submit proposed revisions for its approved mine emergency evacuation and firefighting plan required in 30 CFR 75.1501. The operator will revise the plans to include the hazards and evacuation procedures to be used for well intersections. All underground miners will

be trained in this revised plan within 30 days of the DM's approval of the revised evacuation plan.

The petitioner asserts that the proposed alternative method will at all times guarantee no less than the same measure of protection afforded by the existing standard.

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Sheila McConnell,  
Director,  
Office of Standards, Regulations, and Variances.

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